

Technology Integration Lesson Plan

Lesson: Periodic Table Elements Database

Grade: 8th Science

Brief Description of Lesson: (Strategies) Students will use Microsoft Access to create databases on selected elements of the periodic table. The database will have the following fields:

1. element-text
2. symbol
3. atomic number
4. atomic weight
5. Group/Family (representative metal, transition metal, inner transition metal, nonmetal, metalloid.
6. physical characteristics
7. uses
8. picture

Technology TEKS: (Objectives)

Students are expected to do the following:

1. Work between two applications
2. Input data into a database; sort and find records;
3. Create a database
4. Plan, create and edit databases by defining fields, entering data and designing appropriate layouts
5. Use a variety of layouts in a database
6. Demonstrate a variety of layouts including horizontal and vertical

Science 8 TEKS: (Objectives)

Students are expected to do the following:

- Interpret information on the Periodic Table to understand that physical properties are used to group elements

Day One Activities and procedures:

1. Introduce students to MS Access
 - a. Terminology: field, record, sort, table, form, report
 - b. Create the database
2. Students will create their fields
3. Students will create a form in which to add their data
4. Students will begin adding data

Days Two Activities and procedures:

1. Students continue to add data.
2. Students learn to insert picture into database.

Day Three Activities and procedures:

1. Students continue to add data.
2. Student setup the database to print a report

Day Three Activities and procedures:

1. Students complete database.
2. Students print their reports.

Materials Needed: Database instructions, Web Site Links, MS Access software.

Assessment: Teacher will assess the completed reports for a technology grade and a science grade based on content and appearance.